

What need is the MATREX BCMS addressing?

The real world Army is organized into well defined hierarchies with roles and responsibilities articulated and understood.

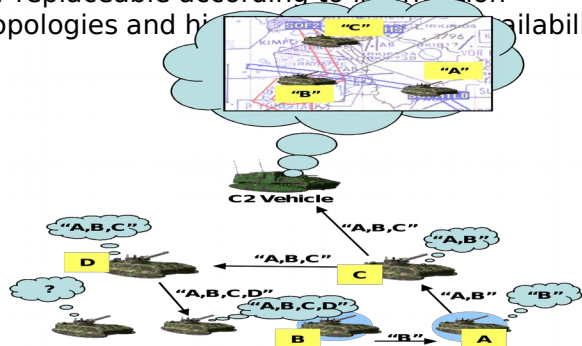
Communication in the real world occurs over real equipment. It is well defined with a purpose and an intended effect.

Decisions are made based on information and understanding - situational awareness.

The degree to which the real world and the simulated world can interoperate depends on the ability of each to impact the other; i.e., their ability to **interact**.

How is the MATREX BCMS addressing this need?

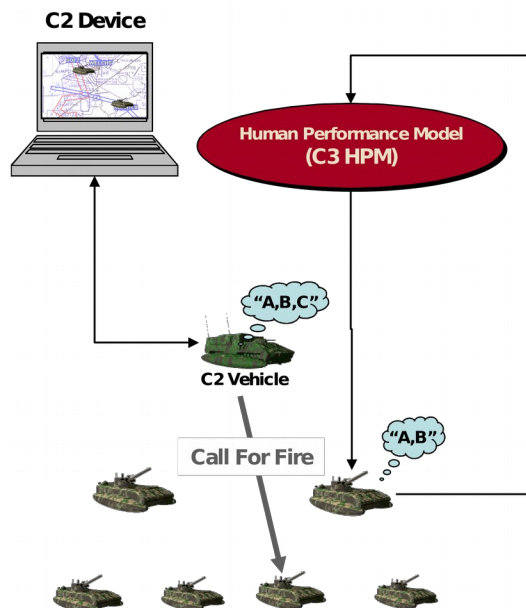
The BCMS enables MATREX to simulate Operating Picture (OP) and Local Operating Picture (LOP) for the operational realities of the force to structure information flow. It also provides interfaces that integrate the effects of the services including communication effects, **Assync concept** and/or doctrine. performance modeling and Command & Control devices; these services are highly configurable or replaceable according to information topologies and **availability**.



The BCMS enables the modeling of the propagation and maintenance of friendly and enemy situational awareness (SA) as it originates from the simulated battlefield:

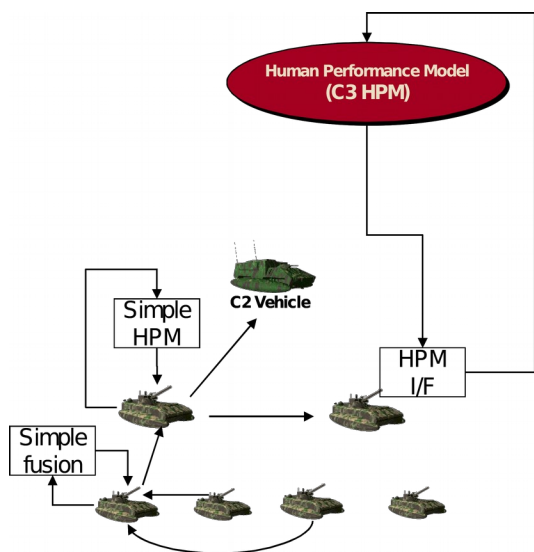
- Converts data from battlefield simulations into reported/detected information
- Models the reporting of that information from the detecting/reporting platform to other platforms via defined reporting hierarchies
- Maintains information about known entities (friendly & enemy) on behalf of the simulation(s) modeling the battlefield entities

Command and Control (C2) devices with human operators and C2 simulation models with constructive behaviors are conveyed SA information via the interface to the COP/LOP provided by the BCMS.

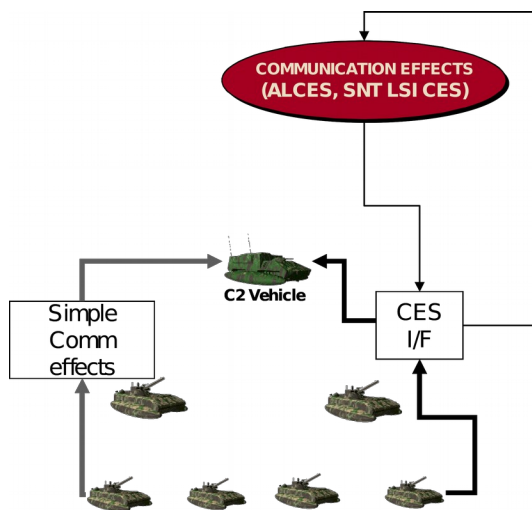


The BCMS can interface with higher fidelity fusion and human performance models and can act as a surrogate in the absence of those models.

Get the right M&S technology to the right place, at the right time, for the Decision Maker and the Warfighter.



Often the network is modeled by simulation applications sharing data without communicated messages being generated and network load affecting successful transmission. The BCMS provides an interface to higher fidelity Communication Effects Server (CES) that effects message transmission based on network load, special factors, weather, terrain, etc. The BCMS can also act as a surrogate CES by providing simple message delays or no delays.



Who is benefiting from the MATREX BCMS?

- Research, Development and Engineering Command
 - AMRDEC
 - ARDEC
 - ARL
 - CERDEC (Fort Belvoir and Fort Monmouth)
 - NSRDEC
 - STTC
 - TARDEC
- Brigade Combat Team Modernization (formerly FCS)
- Various Other TRADOC and ATEC Customers

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Acronyms List

- AMRDEC** = Aviation & Missile Research, Development and Engineering Center
ARDEC = Armament Research, Development and Engineering Center
ARL = Army Research Laboratory
BCMS = Battle Command Management System
CERDEC = Communications-Electronics Research, Development and Engineering Center
CES = Communications Effects Server
COP = Common Operational Picture
C2 = Command & Control
C3HPM = Command and Control, Communications, Human Performance Modeling
ECBC = Edgewood Chemical and Biological Center
FCS = Future Combat System
LOP = Local Operational Picture
LSI = Lead System Integrator
MATREX = Modeling Architecture for Technology, Research and Experimentation
NSRDEC = Natick Soldier Research, Development and Engineering Center
RDECOM = Research, Development, and Engineering Command
SA = Situational Awareness
STTC = Simulation & Training Technology Center
TARDEC = Tank and Automotive Research, Development and Engineering Center
TRADOC = Training and Doctrine Command

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